MODIS sensor Working Group (MsWG) Meeting Summary   **November 14, 2007**

Attendance: Chris Moeller, Gerhard Meister, Gene Eplee, Roy Yi, Scott Blanchard, Hongda Chen, Gary Toller, Junqiang Sun, James Kuyper, Zhengming Wan, Aisheng Wu, Jack Xiong, Brian Wenny

Scheduled Agenda

Item 1: Recent L1B LUT delivery
- Terra forward update – 5.0.39.1 (11/06/07) – m1/RVS

Item 2: Instrument status
- Terra and Aqua MODIS are in nominal operations.
- Terra non-recoverable data loss on 2007/305 00:48:49 – 00:52:03 (Nov. 1) due to SSR playback errors.
- Drag Make-Up Maneuvers (DMU) completed successfully
    o Terra – 2007/312 (Nov. 8), loss of pointing accuracy from 16:33:00 – 18:50:22
    o Aqua – 2007/313 (Nov. 9), loss of pointing accuracy from 14:40:00 – 15:54:10

Item 3: MCST recent activities
- Collection 6 Issue Update:
    o Fill Value vs Interpolated for dead detectors – A 'worst case scenario' test with at least one detector in each band artificially declared dead at all aggregation levels in the QA LUT has been delivered to L1B. Currently in the queue for production of 1-day of 'golden-tile' granules.
- Follow-up discussions on RSB Mirror Side (MS) ratio analysis
    o Additional analysis of the MS differences was presented. Trending of the Band 8 MS ratio for a Lybian desert site using L1B Terra and Aqua was shown. Terra L1B MS trending shows a strong seasonal oscillation, whereas Aqua displays a very stable flat profile with very little change at all AOI over the five years of on-orbit operation. Trending of MS ratio at additional ground sites showed similar patterns, supporting the conclusion that the Terra MS differences are due to a polarization effect.
- A0/A2 Update Strategy for Collection 6
    o A proposed change in the update strategy for A0/A2 was presented. The proposed changes are: Terra: B20, 22-32 and Aqua B31,32 – change from Warmup A0/A2 to A0=0/warmup A2. Analysis showed that choice of A0/A2 can have a large impact on scene temperatures at the extreme ends – within the 'typical' scene temperatures, the impact is small. A comparison for B31 between Aqua and AIRS demonstrated that the 'cold scene bias' of ~1.5K at scene temperatures of 200K in Collection 5 data is reduced to near 0K using the proposed A0/A2 coefficients. Further testing is ongoing and MCST will coordinate with Chris Moeller to test impact of proposed changes on detector differences (striping effects) and analyze comparison data with the ER-2 flight data.

Item 4: Around the Table

- Gerhard: Asked if there were Aqua pre-launch crosstalk measurements. Jack: Yes, there were measurements and analysis showed that compared to Terra, Aqua has no significant crosstalk. On-orbit analysis of the lunar data has verified the conclusion of no crosstalk for Aqua VIS/NIR bands.

Next Meeting: ~Nov 28, 2007

Compiled by B. Wenny